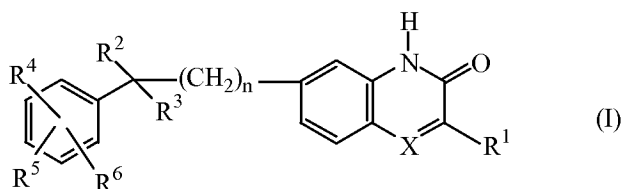


Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the captioned application.

1. (Currently Amended) A compound of formula (I),



the *N*-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl or thienyl;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

-(CH₂)_s- NR⁸R⁹ (a-1),

-O-H (a-2), or

-O-R¹⁰ (a-3),

~~-S-R¹¹~~ (a-4), ~~or~~

~~-C≡N-~~ (a-5);

wherein

s is 0, 1, 2 or 3;

R⁸ is -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinylC₁₋₆alkyl, piperidinylC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy, thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidinyl, arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinylC₁₋₆alkyl,

haloindozolylpiperidinylC₁₋₆alkyl, or

arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl;

R⁹ is hydrogen or C₁₋₆alkyl; and

R¹⁰ is C₁₋₆alkyl, C₁₋₆alkylcarbonyl or di(C₁₋₆alkyl)aminoC₁₋₆alkyl; ~~and~~

~~R¹¹ is di(C₁₋₆alkyl)aminoC₁₋₆alkyl;~~

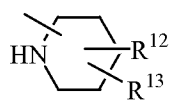
or R³ is a group of formula



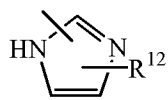
wherein

t is 0, 1, 2 or 3;

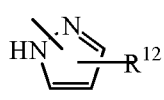
Z is a heterocyclic ring system selected from



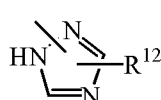
(c-1)



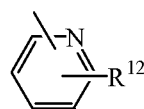
(c-2)



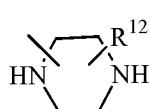
(c-3)



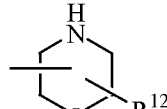
(c-4)



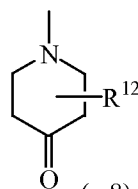
(c-5)



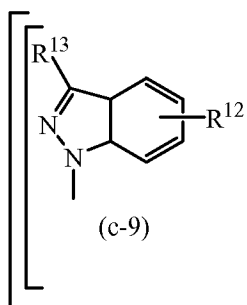
(c-6)



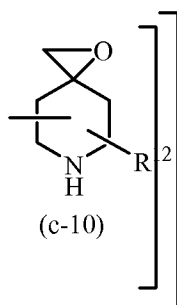
(c-7)



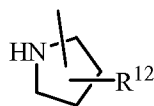
(c-8)



(c-9)

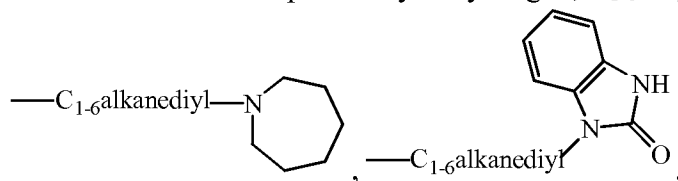


(c-10)



(c-11)

wherein each R¹² independently is hydrogen, C₁₋₆alkyl, aminocarbonyl, hydroxy,



C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkylamino, di(phenylC₂₋₆alkenyl),

piperidinylC₁₋₆alkyl, C₃₋₁₀cycloalkyl, C₃₋₁₀cycloalkylC₁₋₆alkyl,

aryloxy(hydroxy)C₁₋₆alkyl, haloindazolyl, arylC₁₋₆alkyl, arylC₂₋₆alkenyl, morpholino, C₁₋₆alkylimidazolyl, or pyridinylC₁₋₆alkylamino; and each R¹³ independently is hydrogen, piperidinyl or aryl;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C₁₋₆alkyl, C₁₋₆alkyloxy, di(C₁₋₆alkyl)amino, di(C₁₋₆alkyl)aminoC₁₋₆alkyloxy or C₁₋₆alkyloxycarbonyl; or

when R⁵ and R⁶ are on adjacent positions they may taken together form a bivalent radical of formula

-O-CH₂-O (d-1),

-O-(CH₂)₂-O- (d-2),

-CH=CH-CH=CH- (d-3), or

-NH-C(O)-NR¹⁴=CH- (d-4),

wherein R¹⁴ is C₁₋₆alkyl;

aryl is phenyl or phenyl substituted with halo, C₁₋₆alkyl or C₁₋₆alkyloxy;

with the proviso that when

n is 0, X is N, R¹ is C₁₋₆alkyl, R² is hydrogen, R³ is a group of formula (b-1), t is 0, Z is the heterocyclic ring system (c-2) wherein said heterocyclic ring system Z is attached to the rest of the molecule with a nitrogen atom, and R¹² is hydrogen; then at least one of the substituents R⁴, R⁵ or R⁶ is other than hydrogen, halo, C₁₋₆alkyl or C₁₋₆alkyloxy and that 7-benzoyl-3-methyl-2(1H)-quinoxalinone is excluded.

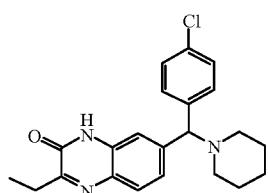
2. (Original) A compound as claimed in claim 1 wherein

n is 0 or 1; X is N or CR⁷, wherein R⁷ is hydrogen; R¹ is C₁₋₆alkyl; R² is hydrogen; R³ is a radical selected from (a-1) or (a-2) or is group of formula (b-1); s is 0, 1 or 2; R⁸ is C₁₋₆alkyl or arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl; t is 0, 1 or 2; Z is a heterocyclic ring system selected from (c-1), (c-2), (c-3), (c-4), (c-5) or (c-11); each R¹² independently is hydrogen or C₁₋₆alkyloxyC₁₋₆alkylamino; each R¹³ independently is hydrogen; and R⁴, R⁵ and R⁶ are each independently selected from hydrogen, halo or C₁₋₆alkyl.

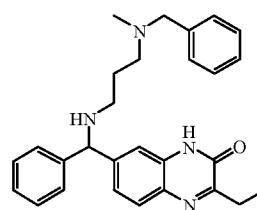
3. (Previously Presented) A compound according to claim 1 wherein

n is 0 or 1; X is N; R¹ is C₁₋₆alkyl; R² is hydrogen; R³ is a radical of formula (a-1) or is a group of formula (b-1); s is 0; R⁸ is arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl; t is 0; Z is a heterocyclic ring system selected from (c-1) or (c-2); each R¹² independently is hydrogen or C₁₋₆alkyloxyC₁₋₆alkylamino; each R¹³ independently is hydrogen; and R⁴, R⁵ and R⁶ are each independently selected from hydrogen or halo.

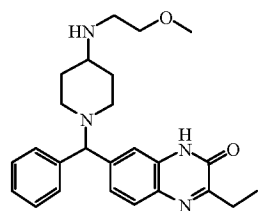
4. (Previously Presented) A compound selected from compound No 5, compound No 9, compound No 2 and compound No 1:



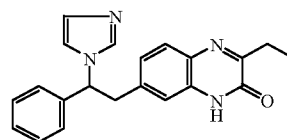
compound 5;



compound 9
·C₂H₂O₄ (1:2) ;



compound 2
·C₂H₂O₄ (2:5) ; and

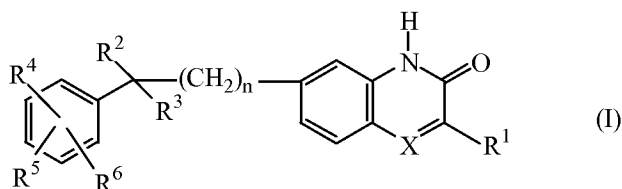


compound 1 .

and the *N*-oxide forms, the addition salts and the stereo-chemically isomeric forms thereof.

5. (Cancelled)
6. (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as an active ingredient a therapeutically effective amount of a compound according to claim 1.

7. (Cancelled)
8. (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of formula (I)



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR⁷, wherein R⁷ is hydrogen or taken together with R¹ may form a bivalent radical of formula -CH=CH-CH=CH-;

R¹ is C₁₋₆alkyl ~~or thienyl~~;

R² is hydrogen, hydroxy, C₁₋₆alkyl, C₃₋₆alkynyl or taken together with R³ may form =O;

R³ is a radical selected from

-(CH₂)_s- NR⁸R⁹ (a-1),

-O-H (a-2), or

-O-R¹⁰ (a-3),

-S-R¹¹ (a-4), ~~or~~

-C≡N- (a-5);

wherein

s is 0, 1, 2 or 3;

R⁸ is -CHO, C₁₋₆alkyl, hydroxyC₁₋₆alkyl, C₁₋₆alkylcarbonyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkylcarbonylaminoC₁₋₆alkyl, piperidinylC₁₋₆alkyl, piperidinylC₁₋₆alkylaminocarbonyl, C₁₋₆alkyloxy,

thienylC₁₋₆alkyl, pyrrolylC₁₋₆alkyl, arylC₁₋₆alkylpiperidinyI,

arylcarbonylC₁₋₆alkyl, arylcarbonylpiperidinyI C₁₋₆alkyl,

haloindozolylpiperidinyI C₁₋₆alkyl, or

arylC₁₋₆alkyl(C₁₋₆alkyl)aminoC₁₋₆alkyl;

R⁹ is hydrogen or C₁₋₆alkyl; and

R¹⁰ is C₁₋₆alkyl, C₁₋₆alkylcarbonyl or di(C₁₋₆alkyl)aminoC₁₋₆alkyl; ~~and~~

~~R¹¹ is di(C₁₋₆alkyl)aminoC₁₋₆alkyl;~~

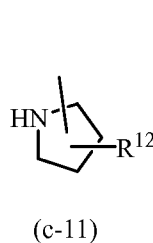
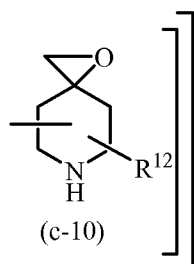
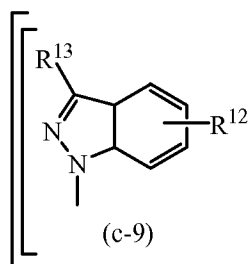
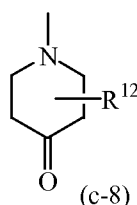
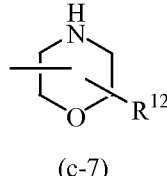
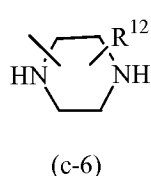
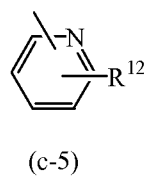
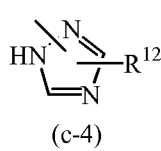
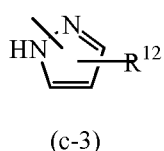
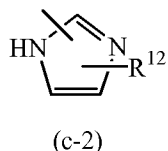
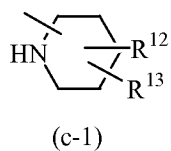
or R³ is a group of formula



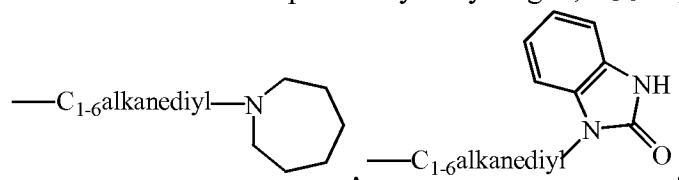
wherein

t is 0, 1, 2 or 3;

Z is a heterocyclic ring system selected from



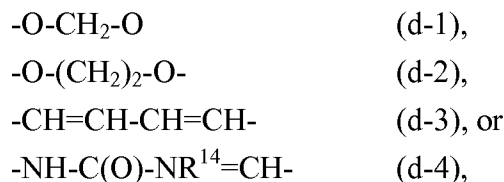
wherein each R¹² independently is hydrogen, C₁₋₆alkyl, aminocarbonyl, hydroxy,



C₁₋₆alkyloxyC₁₋₆alkyl, C₁₋₆alkyloxyC₁₋₆alkylamino, di(phenylC₂₋₆alkenyl), piperidinylC₁₋₆alkyl, C₃₋₁₀cycloalkyl, C₃₋₁₀cycloalkylC₁₋₆alkyl, aryloxy(hydroxy)C₁₋₆alkyl, haloindazolyl, arylC₁₋₆alkyl, arylC₂₋₆alkenyl, morpholino, C₁₋₆alkylimidazolyl, or pyridinylC₁₋₆alkylamino; and each R¹³ independently is hydrogen, piperidinyl or aryl;

R⁴, R⁵ and R⁶ are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C₁₋₆alkyl, C₁₋₆alkyloxy, di(C₁₋₆alkyl)amino, di(C₁₋₆alkyl)aminoC₁₋₆alkyloxy or C₁₋₆alkyloxycarbonyl; or

when R⁵ and R⁶ are on adjacent positions they may taken together form a bivalent radical of formula



wherein R¹⁴ is C₁₋₆alkyl;

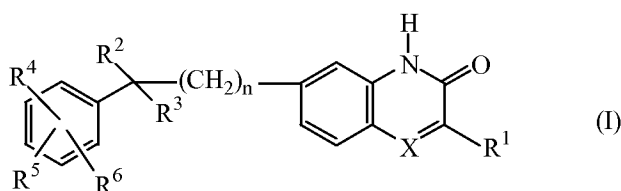
aryl is phenyl or phenyl substituted with halo, C₁₋₆alkyl or C₁₋₆alkyloxy.

9. (Cancelled)

10. (Withdrawn) A method for enhancing the effectiveness of chemotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

11. (Withdrawn) A method for enhancing the effectiveness of radiotherapy of comprising administration of a compound according to claim 1, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy .

12. (Withdrawn) A combination of a compound of formula (I) with a chemotherapeutic agent



the *N*-oxide forms, the pharmaceutically acceptable addition salts and the stereochemically isomeric forms thereof, wherein

n is 0, 1 or 2;

X is N or CR^7 , wherein R^7 is hydrogen or taken together with R^1 may form a bivalent radical of formula $-CH=CH-CH=CH-$;

R^1 is C_{1-6} alkyl or thienyl;

R^2 is hydrogen, hydroxy, C_{1-6} alkyl, C_{3-6} alkynyl or taken together with R^3 may form $=O$;

R^3 is a radical selected from

$-(CH_2)_s-NR^8R^9$ (a-1),

$-O-H$ (a-2), or

$-O-R^{10}$ (a-3),

$-S-R^{11}$ (a-4), or

$-C\equiv N$ (a-5);

wherein

s is 0, 1, 2 or 3;

R^8 , and R^{10} ~~and~~ R^{11} are each independently selected from $-CHO$, C_{1-6} alkyl, hydroxy C_{1-6} alkyl, C_{1-6} alkylcarbonyl, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino C_{1-6} alkyl, C_{1-6} alkyloxycarbonyl, C_{1-6} alkylcarbonylamino C_{1-6} alkyl, piperidinyll C_{1-6} alkylaminocarbonyl, piperidinyll, piperidinyll C_{1-6} alkyl, piperidinyll C_{1-6} alkylaminocarbonyl, C_{1-6} alkyloxy, thienyl C_{1-6} alkyl, pyrrolyll C_{1-6} alkyl, aryll C_{1-6} alkylpiperidinyll, arylcarbonyll C_{1-6} alkyl, arylcarbonyllpiperidinyll C_{1-6} alkyl, haloindozolyllpiperidinyll C_{1-6} alkyl, or aryll C_{1-6} alkyl(C_{1-6} alkyl)amino C_{1-6} alkyl; and R^9 is hydrogen or C_{1-6} alkyl;

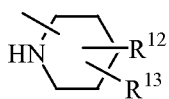
or R^3 is a group of formula



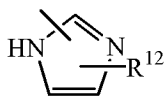
wherein

t is 0, 1, 2 or 3;

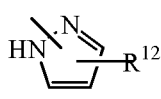
Z is a heterocyclic ring system selected from



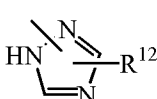
(c-1)



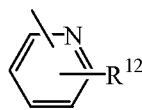
(c-2)



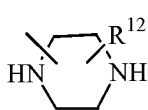
(c-3)



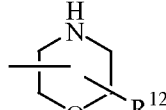
(c-4)



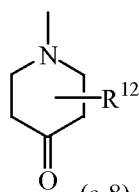
(c-5)



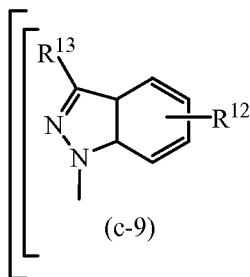
(c-6)



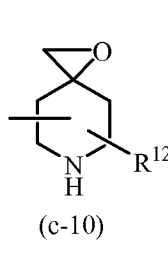
(c-7)



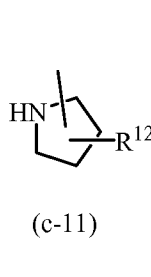
(c-8)



(c-9)

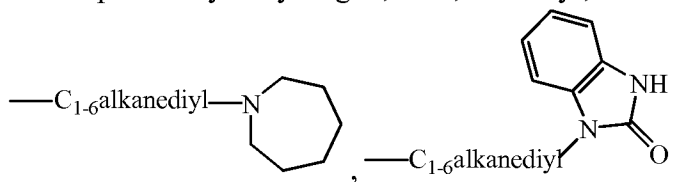


(c-10)



(c-11)

wherein each R^{12} independently is hydrogen, halo, C_{1-6} alkyl, aminocarbonyl, amino,



hydroxy, aryl,

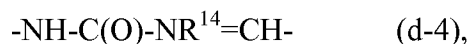
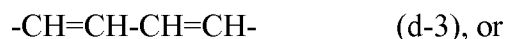
C_{1-6} alkylamino C_{1-6} alkyloxy, C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkylamino, aryl C_{1-6} alkyl, di(phenyl C_{2-6} alkenyl), piperidinyl, piperidinyl C_{1-6} alkyl,

C_{3-10} cycloalkyl, C_{3-10} cycloalkyl C_{1-6} alkyl, aryloxy(hydroxy) C_{1-6} alkyl, haloindazolyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, aryl C_{1-6} alkylamino, morpholino, C_{1-6} alkylimidazolyl, or pyridinyl C_{1-6} alkylamino;

each R^{13} independently is hydrogen, piperidinyl or aryl;

R^4 , R^5 and R^6 are each independently selected from hydrogen, halo, trihalomethyl, trihalomethoxy, C_{1-6} alkyl, C_{1-6} alkyloxy, amino, amino C_{1-6} alkyl, di(C_{1-6} alkyl)amino, di(C_{1-6} alkyl)amino C_{1-6} alkyloxy or C_{1-6} alkyloxycarbonyl, or C_{1-6} alkyl substituted with 1, 2 or 3 substituents independently selected from hydroxy, C_{1-6} alkyloxy, or amino C_{1-6} alkyloxy; or

when R^5 and R^6 are on adjacent positions they may taken together form a bivalent radical of formula

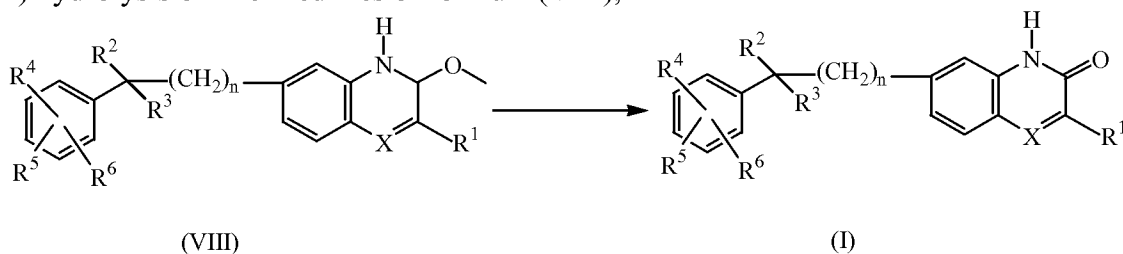


wherein R^{14} is C_{1-6} alkyl;

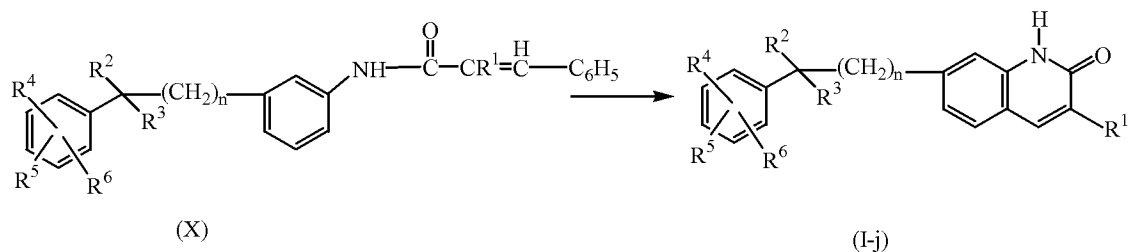
aryl is phenyl or phenyl substituted with halo, C_{1-6} alkyl or C_{1-6} alkyloxy.

13. (Withdrawn) A process for preparation of a compound as claimed in claim 1, comprising

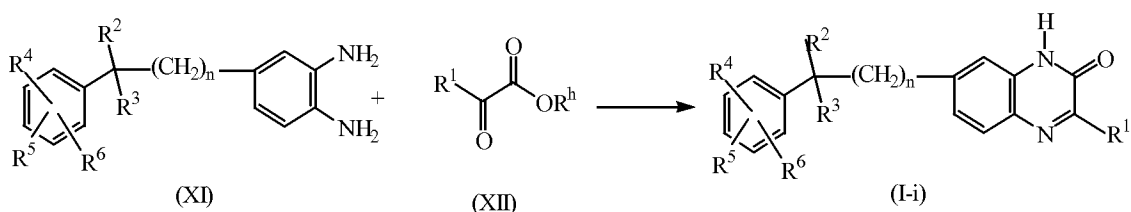
a) hydrolysis of intermediates of formula (VIII),



b) cyclization of intermediates of formula (X), into compounds of formula (I) wherein X is CH, herein referred to as compounds of formula (I-j), and s.



c) condensation of an appropriate ortho-benzenediamine of formula (XI) with an ester of formula (XII) wherein R^h is C_{1-6} alkyl, into compounds of formula (I), wherein X is N, herein referred to as compounds of formula (I-i), in the presence of a carboxylic acid.



14. (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 2.

15. (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 3.

16 (Previously Presented) A pharmaceutical composition comprising pharmaceutically acceptable carriers and as an active ingredient a therapeutically effective amount of a compound as claimed in claim 4.

17. (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 2.

18. (Withdrawn) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 2, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

19. (Withdrawn) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 2, in a therapeutically

effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

20. (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 3.

21. (Withdrawn) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

22. (Withdrawn) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 3, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

23. (Withdrawn) A method of treating in a subject a PARP mediated disorder, said method comprising administering to the subject a therapeutically effective amount of a compound of claim 4.

24. (Withdrawn) A method for enhancing the effectiveness of chemotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to chemotherapy, prior to administration of said chemotherapy .

25. (Withdrawn) A method for enhancing the effectiveness of radiotherapy comprising administration of a compound according to claim 4, in a therapeutically effective amount so as to increase sensitivity of cells to ionizing radiation, prior to administration of said radiotherapy.

26 (Withdrawn) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 2.

27 (Withdrawn) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 3.

28 (Withdrawn) A combination of a compound with a chemotherapeutic agent wherein said compound is a compound of claim 4.

29. (Previously Presented) A product made by the process of claim 13.

30. (Previously Presented) A pharmaceutical composition made by the process of claim 13.